## SEQUENCE LISTING

5 <110> Andrade-Gordon, Patricia
Darrow, Andrew L.
Qi, Jenson

10 <120> DNA encoding human serine protease C-E

15 <130> ORT-1030

<140> <141>

25 <160> 11

<170> PatentIn Ver. 2.0

<210> 1

35 <211> 1430

<212> DNA

<213> Homo sapiens

<400> 1

cgttccgcct cccaggataa aacctggggc gacctgcagg gaacctacac accctgaccc 60 5 gcatcgccct gggtctctcg agcctgctgc ctgctccccc gcccaccag ccatggtggt 120 ttctggagcg cccccagccc tgggtggggg ctgtctcggc accttcacct ccctgctgct 180 gctggcgtcg acagccatcc tcaatgcggc caggatacct gttcccccag cctgtgggaa 240 10 gccccagcag ctgaaccggg ttgtgggcgg cgaggacagc actgacagcg agtggccctg 300 gatogtgago atocagaaga atgggacoca coactgogoa ggttototgo toaccagoog 360 15 ctgggtgatc actgctgccc actgtttcaa ggacaacctg aacaaaccat acctgttctc 420 tgtgctgctg ggggcctggc agctggggaa ccctggctct cggtcccaga aggtgggtgt 480 tgcctgggtg gagccccacc ctgtgtattc ctggaaggaa ggtgcctgtg cagacattgc 540 20 cctggtgcgt ctcgagcgct ccatacagtt ctcagagcgg gtcctgccca tctgcctacc 600 tgatgcctct atccacctcc ctccaaacac ccactgctgg atctcaggct gggggagcat 660 25 ccaagatgga gttcccttgc cccaccctca gaccctgcag aagctgaagg ttcctatcat 720 cgactcggaa gtctgcagcc atctgtactg gcggggagca ggacagggac ccatcactga 780 ggacatgctg tgtgccggct acttggaggg ggagcgggat gcttgtctgg gcgactccgg 840 30 gggccccctc atgtgccagg tggacggcgc ctggctgctg gccggcatca tcagctgggg 900 cgagggctgt gccgagcgca acaggcccgg ggtctacatc agcctctctg cgcaccgctc 960 35 ctgggtggag aagatcgtgc aaggggtgca gctccgcggg cgcgctcagg ggggtggggc 1020 cctcagggca ccgagccagg gctctggggc cgccgcgcgc tcctagggcg cagcgggacg 1080 cggggctcgg atctgaaagg cggccagatc cagatctgga tctggatctg cggcggcctc 1140 40 gggcggtttc ccccgccgta aataggctca tctacctcta cctctggggg cccggacggc 1200

	tgctgcggaa	aggaaacccc	ctccccgacc	cgcccgacgg	cctcaggccc	cgcctccaag	1260
	gcatcaggcc	ccgcccaacg	gcctcatgtc	cccgccccca	cgacttccgg	cccgcccc	1320
5	gggccccagc	gcttttgtgt	atataaatgt	taatgatttt	tataggtatt	tgtaaccctg	1380
	cccacatatc	ttatttattc	ctccaatttc	aataaattat	ttattctcca		1430

<210> 2

<211> 1166

15 <212> DNA

<213> Artificial Sequence

20

<220>

<223> Description of Artificial Sequence: C-E catalytic

domain in a zymogen activated construct

<400> 2

gaattcacca ccatggacag caaaggttcg tcgcagaaat cccgcctgct cctgctgctg 60
gtggtgtcaa atctactctt gtgccagggt gtggtctccg actacaagga cgacgacgac 120
gtggacgcgg ccgctcttgc tgcccccttt gatgatgatg acaagatcgt tgggggctat 180
gctctagagg acagcgagtg gccctggatc gtgagcatcc agaagaatgg gacccaccac 240
tgcgcaggtt ctctgctcac cagccgctgg gtgatcactg ctgcccactg tttcaaggac 300
aacctgaaca aaccatacct gttctctgtg ctgctggggg cctggcagct ggggaaccct 360

	ggctctcggt	cccagaaggt	gggtgttgcc	tgggtggagc	cccaccctgt	gtattcctgg	420
	aaggaaggtg	cctgtgcaga	cattgccctg	gtgcgtctcg	agcgctccat	acagttctca	480
5	gagcgggtcc	tgcccatctg	cctacctgat	gcctctatcc	acctccctcc	aaacacccac	540
	tgctggatct	caggctgggg	gagcatccaa	gatggagttc	ccttgcccca	ccctcagacc	600
10	ctgcagaagc	tgaaggttcc	tatcatcgac	tcggaagtct	gcagccatct	gtactggcgg	660
10	ggagcaggac	agggacccat	cactgaggac	atgctgtgtg	ccggctactt	ggaggggag	720
	cgggatgctt	gtctgggcga	ctccgggggc	cccctcatgt	gccaggtgga	cggcgcctgg	780
15	ctgctggccg	gcatcatcag	ctggggcgag	ggctgtgccg	agcgcaacag	gcccggggtc	840
	tacatcagcc	tctctgcgca	ccgctcctgg	gtggagaaga	tcgtgcaagg	ggtgcagctc	900
20	cgcgggcgcg	ctcagggggg	tggggccctc	agggcaccga	gccagggctc	tggggccgcc	960
20	gcgcgctcct	ctagacatca	ccatcaccat	cactagcggc	cgcttccctt	tagtgagggt	1020
	taatgcttcg	agcagacatg	ataagataca	ttgatgagtt	tggacaaacc	acaactagaa	1080
25	tgcagtgaaa	aaaatgcttt	atttgtgaaa	tttgtgatgc	tattgcttta	tttgtaacca	1140
	ttataagctg	caataaacaa	gttgac				1166

<210> 3

<211> 22

35 <212> DNA

<213> Artificial Sequence

40

<220>

```
<223> Description of Artificial Sequence: primer
            oligonucleotide
 5
      <400> 3
                                                                         22
      ggataaaacc tggggcgacc tg
10
      <210> 4
15
      <211> 24
      <212> DNA
      <213> Artificial Sequence
20
      <220>
25
      <223> Description of Artificial Sequence: primer
            oligonucleotide
30
      <400> 4
      tccgggcccc cagaggtaga tgag
                                                                        24
35
      <210> 5
      <211> 20
40
      <212> DNA
```

5	<220>	
	<223> Description of Artificial Sequence: primer	
10	oligonucleotide	
	<400> 5	
15	ctgcagaagc tgaaġgttcc	20
20	<210> 6	
	<211> 20	
	<212> DNA	
25	<213> Artificial Sequence	
30	<220>	
00	<223> Description of Artificial Sequence: primer	
	oligonucleotide	
35		
	<400> 6	
40	cagagaggct gatgtagacc	20

<213> Artificial Sequence

<210> 7 <211> 317 <212> PRT <213> Homo sapiens <400> 7 Met Val Val Ser Gly Ala Pro Pro Ala Leu Gly Gly Cys Leu Gly Thr Phe Thr Ser Leu Leu Leu Leu Ala Ser Thr Ala Ile Leu Asn Ala Ala Arg Ile Pro Val Pro Pro Ala Cys Gly Lys Pro Gln Gln Leu Asn Arg Val Val Gly Gly Glu Asp Ser Thr Asp Ser Glu Trp Pro Trp Ile Val Ser Ile Gln Lys Asn Gly Thr His His Cys Ala Gly Ser Leu Leu

Thr Ser Arg Trp Val Ile Thr Ala Ala His Cys Phe Lys Asp Asn Leu Asn Lys Pro Tyr Leu Phe Ser Val Leu Leu Gly Ala Trp Gln Leu Gly Asn Pro Gly Ser Arg Ser Gln Lys Val Gly Val Ala Trp Val Glu Pro His Pro Val Tyr Ser Trp Lys Glu Gly Ala Cys Ala Asp Ile Ala Leu Val Arg Leu Glu Arg Ser Ile Gln Phe Ser Glu Arg Val Leu Pro Ile Cys Leu Pro Asp Ala Ser Ile His Leu Pro Pro Asn Thr His Cys Trp 

180 185 190

Ile Ser Gly Trp Gly Ser Ile Gln Asp Gly Val Pro Leu Pro His Pro

Gln Thr Leu Gln Lys Leu Lys Val Pro Ile Ile Asp Ser Glu Val Cys Ser His Leu Tyr Trp Arg Gly Ala Gly Gln Gly Pro Ile Thr Glu Asp Met Leu Cys Ala Gly Tyr Leu Glu Gly Glu Arg Asp Ala Cys Leu Gly Asp Ser Gly Gly Pro Leu Met Cys Gln Val Asp Gly Ala Trp Leu Leu Ala Gly Ile Ile Ser Trp Gly Glu Gly Cys Ala Glu Arg Asn Arg Pro Gly Val Tyr Ile Ser Leu Ser Ala His Arg Ser Trp Val Glu Lys Ile Val Gln Gly Val Gln Leu Arg Gly Arg Ala Gln Gly Gly Ala Leu

Arg Ala Pro Ser Gln Gly Ser Gly Ala Ala Ala Arg Ser

305 310 315

5

4210> 8

4211> 327

4212> PRT

15 <213> Artificial Sequence

25

<400> 8

<223> Description of Artificial Sequence: C-E catalytic

domain fusion protien

Val Val Ser Asn Leu Leu Cys Gln Gly Val Val Ser Asp Tyr Lys

20 25 30

40

Asp Asp Asp Val Asp Ala Ala Ala Leu Ala Ala Pro Phe Asp Asp

20

35 40 45

Asp Asp Lys Ile Val Gly Gly Tyr Ala Leu Glu Asp Ser Glu Trp Pro

Trp Ile Val Ser Ile Gln Lys Asn Gly Thr His His Cys Ala Gly Ser

70 75 80

Leu Leu Thr Ser Arg Trp Val Ile Thr Ala Ala His Cys Phe Lys Asp

Asn Leu Asn Lys Pro Tyr Leu Phe Ser Val Leu Leu Gly Ala Trp Gln 100 105 110

Leu Gly Asn Pro Gly Ser Arg Ser Gln Lys Val Gly Val Ala Trp Val  $30\,$ 

35 Glu Pro His Pro Val Tyr Ser Trp Lys Glu Gly Ala Cys Ala Asp Ile
130 135 140

40
Ala Leu Val Arg Leu Glu Arg Ser Ile Gln Phe Ser Glu Arg Val Leu

Pro Ile Cys Leu Pro Asp Ala Ser Ile His Leu Pro Pro Asn Thr His Cys Trp Ile Ser Gly Trp Gly Ser Ile Gln Asp Gly Val Pro Leu Pro His Pro Gln Thr Leu Gln Lys Leu Lys Val Pro Ile Ile Asp Ser Glu Val Cys Ser His Leu Tyr Trp Arg Gly Ala Gly Gln Gly Pro Ile Thr Glu Asp Met Leu Cys Ala Gly Tyr Leu Glu Gly Glu Arg Asp Ala Cys Leu Gly Asp Ser Gly Gly Pro Leu Met Cys Gln Val Asp Gly Ala Trp 

Leu Leu Ala Gly Ile Ile Ser Trp Gly Glu Gly Cys Ala Glu Arg Asn

Arg Pro Gly Val Tyr Ile Ser Leu Ser Ala His Arg Ser Trp Val Glu 

Lys Ile Val Gln Gly Val Gln Leu Arg Gly Arg Ala Gln Gly Gly 

Ala Leu Arg Ala Pro Ser Gln Gly Ser Gly Ala Ala Ala Arg Ser Ser 

Arg His His His His His

<210> 9 <211> 40 

<212> DNA

<213> Artificial Sequence

<220>

```
<223> Description of Artificial Sequence: nested primer
            oligonucleotide
 5
      <400> 9
                                                                        40
      ggacatgctg tgtgccggct acttggaggg ggagcgggat
10
      <210> 10
15
      <211> 33
      <212> DNA
      <213> Artificial Sequence
20
      <220>
25
      <223> Description of Artificial Sequence: primer
            oligonucleotide
30
      <400> 10
                                                                        33
      aggatctaga ggacagcgag tggccctgga tcg
35
      <210> 11
      <211> 33
40
      <212> DNA
```

<213> Artificial Sequence
---------------------------

5 <220>

<223> Description of Artificial Sequence: primer

oligonucleotide

10

<400> 11

15 gtgctctaga ggagcgcgcg gcggccccag agc

33